

CLAIMS

What is claimed is:

1. A method of controlling a recording speed of an optical disc recording system, comprising:

detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

adjusting the recording speed of the optical disc recording system with reference to the detected error information.

2. The method of claim 1, wherein the detection of the error information comprises:

counting a number of times the level of the servo control signal exceeds a reference level within a predetermined period of time; and

comparing the counted number of times the level of the servo control signal exceeds the reference level within the predetermined period of time, with an allowable number of level errors.

3. The method of claim 1, wherein the servo control signal is a tracking error signal.

4. A method of controlling a recording speed of an optical disc recording system, comprising:

detecting whether an Absolute Time In Pre-groove (ATIP) sync signal is abnormal at the recording speed of the optical disc recording system;

detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

adjusting the recording speed of the optical disc recording system with reference to whether the ATIP sync signal is abnormal and the detected error information.

5. The method of claim 4, wherein the detection as to whether the ATIP sync signal is abnormal comprises:

counting a number of times the ATIP sync signal is unlocked within a predetermined period of time; and

comparing the counted number of times the ATIP sync signal is unlocked within the predetermined period of time, with an allowable number of unlocking times.

6. The method of claim 4, wherein the detection of the error information comprises:
counting a number of times the level of the servo control signal exceeds a reference level within a predetermined period of time; and

comparing the counted number of times the level of the servo control signal exceeds the reference level within the predetermined period of time, with an allowable number of level errors.

7. The method of claim 4, wherein the servo control signal is a tracking error signal.

8. An apparatus controlling a recording speed of an optical disc recording system, comprising:

a level error detector detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

a recording speed adjustor adjusting the recording speed of the optical disc recording system with reference to the error information.

9. The apparatus of claim 8, wherein the level error detector comprises:

a level error counter counting a number of times the level of the servo control signal exceeds a reference level within a predetermined period of time; and

a determinator comparing the counted number of times the level of the servo control signal exceeds the reference level within the predetermined period of time, with an allowable number of level errors.

10. The apparatus of claim 8, wherein the servo control signal is a tracking error signal.

11. An apparatus controlling a recording speed of an optical disc recording system, comprising:

an Absolute Time In Pre-groove (ATIP) sync signal error detector detecting whether an ATIP sync signal is abnormal at the recording speed of the optical disc recording system;

a level error information detector detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

a recording speed adjustor adjusting the recording speed of the optical disc recording system with reference to whether the ATIP sync signal is abnormal and the error information.

12. The apparatus of claim 11, wherein the ATIP sync signal error detector comprises:

an unlocking counter counting a number of times the ATIP sync signal is unlocked within a predetermined period of time; and

a comparator comparing the counted number of times the ATIP sync signal is unlocked within the predetermined period of time, with an allowable number of unlocking times.

13. The apparatus of claim 11, wherein the level error information detector comprises:

a level error counter counting a number of times the level of the servo control signal exceeds a reference level within a predetermined period of time; and

a determinator comparing the counted number of times the level of the servo control signal exceeds the reference level within the predetermined period of time, with an allowable number of level errors.

14. The apparatus of claim 11, wherein the servo control signal is a tracking error signal.

15. An optical recording device including an executable program code, the code comprising:

detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

adjusting the recording speed of the optical disc recording system with reference to the error information.

16. The optical recording device of claim 15, wherein the detection of the error information of the executable program code comprises:

counting a number of times the level of the servo control signal exceeds a reference level within a predetermined period of time; and

comparing the counted number of times the level of the servo control signal exceeds the reference level within the predetermined period of time, with an allowable number of level errors.

17. The optical recording device of claim 15, including the executable program code, wherein the servo control signal is a tracking error signal.

18. An optical recording device including an executable program code, the code comprising:

detecting whether an Absolute Time In Pre-groove (ATIP) sync signal is abnormal at the recording speed of the optical disc recording system;

detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

adjusting the recording speed of the optical disc recording system with respect to the detected error information and with reference to whether the ATIP sync signal is abnormal.

19. The optical recording device of claim 18, including the executable program code, wherein the detection as to whether the ATIP sync signal is abnormal comprises:

counting a number of times the ATIP sync signal is unlocked within a predetermined period of time; and

comparing the counted number of times the ATIP sync signal is unlocked within the predetermined period of time, with an allowable number of unlocking times.

20. The optical recording device of claim 18, including the executable program code, wherein the detection of the error information comprises:

counting a number of times the level of the servo control signal exceeds a reference level within a predetermined period of time; and

comparing the counted number of times the level of the servo control signal exceeds the reference level within the predetermined period of time, with an allowable number of level errors.

21. The optical recording device of claim 18, including the executable program code, wherein the servo control signal is a tracking error signal.

22. A method of controlling a recording speed of an optical disc recording system, comprising:

detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

adjusting the recording speed of the optical disc recording system with reference to a level of a tracking error (TE) signal, preventing a write fail from occurring due to instability of the servo control signal.

23. A method of controlling a recording speed of an optical disc recording system, comprising:

detecting error information with respect to a level of a servo control signal of the optical disc recording system; and

adjusting the recording speed of the optical disc recording system with reference to a level of an unlocking state of an ATIP sync signal.